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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,666	11/19/2001	Timothy P. Blair	10013014-1	8495

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EXAMINER	
REFAI, RAMSEY	

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,666	BLAIR ET AL.	
	Examiner	Art Unit	
	Ramsey Refai	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 20-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 20-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Responsive to Request for Continued Examination (RCE) received on November 17, 2005. Claim 1 has been amended. Claims 1-11 and 20-23 remain presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-11 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakke et al (U.S. Patent No. 6,704,812) in view of Carney et al (U.S. Patent No. 6,615,161).

4. As per claim 1, Bakke et al teach a method for configuring data communication paths between a central controller and a plurality of printing devices **(column 1, line 25)** via a plurality of appliances, the method comprising:

ensuring one or more appliances of the plurality of appliances are active **(column 1, line 66-column 2,line 7, column 4, line 14-24)**;

for each of the printing devices, determining communication capabilities with the one or more appliances to determine communication paths between the plurality of printing devices and the one or more appliances **(column 2, line 1-20, column 3, lines 33-42)**;

transmitting signals indicative of the communication capabilities to the central controller **(column 5, lines 30-42, column 4, lines 45-57)**; and

mapping respective communication paths between the central controller and the printing devices via the one or more appliances as a function of the communication capabilities to obtain an automatic appliance failover to allow diagnostic data to be collected from a selected printing device by way of multiple appliances **(column 4, lines 14-67, column 1, lines 35-39)**.

5. Bakke et al fail to explicitly teach an appliance configured to collect diagnostic data from one or more of the plurality of printing devices and to transmit the diagnostic data to the central controller.

6. However, Carney et al teach that status of printers are collected either by a management device, which periodically polls the printers for status information or by a printer notifying a management station on its status **(column 1, lines 25-62).** It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Bakke et al and Carney et al because doing so would create a failover system for collector devices that collect diagnostic information from printers in order to provide an alternate path to obtain diagnostic data form a printer if the primary collector fails.

7. As per claim 2, Bakke et al teach:

for each of the printing devices, identifying an optimal path between the appliance and the printing device; and wherein the mapping includes: mapping the respective communication paths between the central controller and the printing devices as a function of the optimal paths **(column 2, lines 1-19, column 3, line 57-column 4, line 13, column 5, lines 20-22)**.

8. As per claim 3, Bakke et al teach the identifying includes at least one of:

determining one of a plurality of paths between the a selected appliance and the a selected printing, device having a least number of hops; and determining one of a plurality of paths between the selected appliance and the selected printing device achieving a shortest communication time **(column 12, lines 23-67)**.

9. As per claim 4, Bakke et al teach:

for each of the printing devices, determining a second communication capability between a second appliance and the printing device; transmitting signals indicative of the second communication capabilities to the central controller; and wherein the mapping includes: mapping the respective communication paths between the central controller and the printing devices via the first and second appliances as a function of the first and second communication capabilities **(column 2, lines 1-20, column 3, lines 33-67, column 4, lines 14-67)**.

10. As per claim 5, Bakke et al teach substantially balancing respective printing device loads across the appliances **(column 4, lines 55-67)**.

11. Claims 6-11 and 20-23 contain similar limitations as claims 1-5 above, therefore are rejected under the same rationale.

Response to Arguments

12. Applicant's arguments filed October 13, 2005 have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance that Bakke et al fails to teach or suggest I/O adaptor failover and is only concerned with failed independent physical paths.
- In response, the Examiner respectfully disagrees. Bakke et al teach devices with multiple ports, each port having its own I/O adapter, each port having a distinct independent physical pathway. Bakke et al further teaches a redundancy manager that has the capability to detect a failed *physical* path and dynamically reroute a command to a *device* on a path other than the failed path. The redundancy manager than issues a "device reset" command to place the respective port on the failed physical path of the device to a correct state. Therefore Bakke et al meets the scope of the claimed limitation. **(See column 1, line 66-column 2, line 19, column 13, lines 30-67).**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2152

RR
February 15, 2006

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER